UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT:	CLEAN AIR ACT INSPECTION REPORT S.H. Bell, Chicago, Illinois
FROM:	Patrick Miller, Environmental Engineer AECAB (MN/OH)
THRU:	Brian Dickens, Section Supervisor AECAB (MN/OH)
TO:	File

BASIC INFORMATION

Facility Name: S.H. Bell Company (S.H. Bell)

Facility Location: 10218 South Avenue O, Chicago, Illinois 60617

Date of Inspection: July 6, 2022

EPA Inspector(s):
1. Patrick Miller, Environmental Engineer (AECAB)
2. Meaghan Pashen, Environmental Engineer (AECAB)

Other Attendees:
1. Paul Chepela, Terminal Manager, S.H. Bell

Contact Email Address: pchepela@shbellco.com

Purpose of Inspection: Determine compliance with applicable IL State Implementation Plan (SIP) requirements, including fugitive dust.

Facility Type: Ferroalloy storage facility

Regulations Central to Inspection: IL SIP Rule 201.141, no person shall cause the discharge or emissions of any contaminant into the environment…so as to cause or tend to cause air pollution in Illinois (paraphrased), 212.301, fugitive PM emissions cannot cross the property line of the facility (paraphrased); and Rule 212.306, cleaning and treating roadways with, among other things, chemical dust suppressants (paraphrased).

Arrival Time: 9:20 AM
Departure Time: 11:00 AM

Inspection Type:
☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Small Business Resource Information Sheet not provided. Reason: Not a small business
☒ Provided CBI warning to facility

The following information was obtained verbally from Mr. Chepela unless otherwise noted.

Process Description:
S.H. Bell owns and operates a ferroalloy storage facility. S.H. Bell receives, stores, handles, and ships ferroalloys used in the steelmaking industry. The ferroalloy is received by barge and truck as either loose bulk material or in supersacks. When bulk ferroalloy is received by barge the ferroalloy is watered prior to unloading with an excavator. The water is applied directly to the ferroalloy with an excavator bucket. The bulk ferroalloy is transferred to its storage location with a front-end loader. When bulk ferroalloy is received by truck, the truck dumps the ferroalloy into a partially enclosed dump pan connected to a portable baghouse. Front-end loaders then take the bulk ferroalloy to its storage location.

Ferroalloy is shipped to the customers by trucks. Trucks are loaded in either the Ryerson or Norcon building depending on the order. Both the Ryerson and Norcon buildings have truck loadout areas that are controlled by baghouses. The truck drives in and is positioned under a canopy hood for the baghouse. An S.H. Bell employee operating a front-end loader closes the overhead doors with a remote. Each door is equipped with a switch which indicates whether it's opened or closed. The baghouse turns on when both switches on the doors indicate closed. Differential pressure is monitored on the baghouse.

S.H. Bell has water misters that are used to control fugitive emissions if the ferroalloy cannot be watered. Watering bulk ferroalloy is the primary means of controlling fugitive emissions when unloading.

Staff Interview:
EPA discussed the monitoring data submitted for May 2022, specifically, May 2, 2022, which showed high concentrations of manganese, and May 20, 2022, which showed high PM10 concentrations as recorded by the S1 PM10 FEM monitor. Mr. Chepela indicated that normal operations took place on May 2, 2022. Mr. Chepela indicated that normal operations took place, and the winds were blowing from the south toward the facility on May 20, 2022. EPA requested

production information regarding operations taking place at the facility for the month of May 2022.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:
During the inspection, EPA observed barge unloading of ferroalloy in supersacks. No visible emissions were observed during supersack unloading. EPA observed truck loadout from the Ryerson building. The overhead doors closed and the baghouse turned on. The pressure drop for the Ryerson building baghouse was 3.2 psi. EPA observed truck loadout from the Norcon building. The overhead doors closed and the baghouse turned on. The pressure drop for the Norcon building baghouse was 2.8 psi. No visible emission were observed from the building or the baghouse stacks during truck loadout. During the inspection, EPA also observed a water truck spraying the roadways. Mr. Chepela indicated that a dust suppressant, calcium chloride, was being applied to the roadways.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:
For each day of May 2022, EPA requested the following information:

- Type of material(s) unloaded and whether it was barge, truck or rail, if any;
- Type of material(s) loaded and the mode of transportation, in any;
- Type of material(s) processed through a screener, if any; and
- Type of material(s) processed through a crusher, if any.

Concerns: EPA reiterated its concerns regarding the monitoring data for May 2022, specifically, May 2, 2022, which showed high concentrations of manganese, and May 20, 2022, which showed high PM10 concentrations as recorded by the S1 PM10 FEM monitor.

DIGITAL SIGNATURES

Report Author: PATRICK MILLER Digitally signed by PATRICK MILLER Date: 2022.07.25 12:49:04 -05'00'

Section Supervisor: Brian Dickens Digitally signed by Brian Dickens Date: 2022.07.25 13:25:49 -05'00'

APPENDICES AND ATTACHMENTS

1. Appendix A – Digital Image Log

Facility Name: S.H. Bell Company
Facility Location: 10218 South Avenue O, Chicago, Illinois 60617
Date of Inspection: July 6, 2022

APPENDIX A: DIGITAL IMAGE LOG

1. **Inspector Name:** Patrick Miller	2. **Archival Record Location:** R5 Electronic Records Center

Image Number	File Name	Date and Time (incl. Time zone and DST)	Latitude and Longitude	Description of Image
1	IMG_0096.JPG	07/06/2022 09:40 AM (central)		Barge unloading of supersacks
2	IMG_0097.JPG	06/07/2022 09:41 AM (central)		Barge unloading of supersacks
3	IMG_0098.JPG	06/07/2022 09:41 AM (central)		Barge unloading of supersacks
4	IMG_0099.JPG	06/07/2022 09:41 AM (central)		Barge unloading of supersacks
5	IMG_0100.JPG	06/07/2022 09:41 AM (central)		Barge unloading of supersacks
6	IMG_0101.JPG	06/07/2022 09:57 AM (central)		S1 PM10 FEM monitor
7	IMG_0102.JPG	06/07/2022 09:58 AM (central)		S1 PM10 FEM monitor
8	IMG_0103.JPG	06/07/2022 10:04 AM (central)		New construction of enclosed Norcon Building
9	IMG_0104.JPG	06/07/2022 10:11 AM (central)		Ryerson building with truck dump pans
10	IMG_0105.JPG	06/07/2022 10:11 AM (central)		Ryerson building with truck dump pans
11	IMG_0106.JPG	06/07/2022 10:15 AM (central)		Ryerson building with truck dump pans
12	IMG_0107.JPG	06/07/2022 10:17 AM (central)		Ryerson truck loadout area with baghouse